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10

The reaction of the carbonyl group with primary amines
 (H. H. G. Oelkers, *Chem. Commun.* 19, 879, 1951 (in German)). The reaction between carbonyl
 groups and NH_2 or primary amines was followed polaro-
 graphically. In this reaction, only the base form of the
 amine takes part. The rate of the reaction to reach equl. in
 alk. soln. is slow compared to the rate of the electrode proc-
 ess. The imine compound formed is reduced at more pos-
 sible potentials than the original carbonyl compound. Equil. consts.
 are given for the reaction of Ac^+CH_3 , $\text{Ph}^+\text{C}^+\text{CH}_3$, $\text{Me}_2\text{C}^+\text{O}$,
 cyclohexanone, AcH , BzH , Ac , the oxidation product of
 ascorbic acid and NH_2 , $\text{NH}_2\text{CH}_2\text{COH}$, alanine, glutamine,
 histamine, and histidine. Polarographic criteria are given
 for the estn. of the no. of mols. taking part in the reaction.
 The polarographic detn. of $\text{Me}_2\text{C}^+\text{O}$, cyclohexanone, and the
 oxidation products of ascorbic acid is possible in the presence
 of NH_2 or primary amines. The reaction described is char-
 acteristic for primary amines and for most carbonyl compounds
 and can be used for their detn. A table is included giving
 as values of equl. consts. and shift of the half-stage
 potentials.

Harold H. Levine

"Determination of pyroracemic acids in lactic acid."
Chemicke Zvesti, Bratislava, Vol 6, No 3/4, Mar./Apr. 1952, p. 191

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1952, Lib. of Congress

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Determination of sulfhydryl compounds in some fruits.
Příz Žeman (Central Polarographic Inst., Prague, Czech.).
Chem. Listy 46, 73-8 (1952).--In the current methods of
detn. of ascorbic acid (I) other reducing compds. may give
high results for the content of I. Reducing compds. containing
the SH group can be detd. polarographically with glutathione
as a standard. The SH compds. form an anodic wave
shifted by approx. 300 mv. to the more neg. potential than
the potential of I. The detn. is carried out directly in the
fruit juices mixed with an acetate buffer at pH 4.7. The
content of I and SH compds. in red currants, raspberries,
tomatoes, gooseberries, cherries, black cherries, elderberries,
green nuts, blackberries, pineapple, and watermelons, sev-
ice fruits, apricots, and plums was stud. M. Hušilský

Electrochemistry 4

Polarographic behavior of anthocyanins. I. Petr Zuppan
(Central Polarographic Inst., Prague, Czech.). *Chem.
Listy* 46, 326-3 (1952).--The polarographic behavior of
anthocyanins in aq. and alc. solns. at various pH values was
followed. Any color change of the solns. corresponded to
a wave on the curve. Half-wave potentials in a tartrate
buffer at pH 3.0 with Tl (I) ions as standards were detd.:
pelargonidin -0.40 , cyanidin, -0.40 , delphinidin -0.42 ,
pelargonin -0.41 , cyanin -0.41 , and delphinine (two
waves) -0.30 and -0.52 v. Anthocyanins were detd. in
fruit juices acidified with H_2SO_4 to pH 1.5-3 and in dried
blooms extd. with 1% HCl. M. Hudlický

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Electrochemistry
4

Polarography of barbituric acid derivatives. I. Barbituric acid. J. Koryta and P. J. Zeman (Central Polarographic Inst., Prague, Czech. J. Chem. Ind. 40, 381 01 (1952)). Barbituric acid (I) gives an anodic wave at pH 3.5-13. Its half-wave potential toward the solid calomel electrode is 0.23 v. at pH 3.5 and -0.08 v. at pH 9.4. The height of the wave is proportional to the concn. at low concns. and const. at higher concns. In the beginning the current is limited by the diffusion of I to the electrode surface. The compd. of I with the electrode Hg is adsorbed by the surface of the electrode and changes its capacity. When the surface of the electrode is occupied, at higher concns. and prolonged falling of the drop, the wave has an adsorption character. At pH 3.5-6.5, a more pos. wave is formed which is difficult to read. The range over which the wave is proportional to the concn. can be extended by the use of a streaming electrode. M. Hudlický

Perfume 17

Polarography of heart glycosides containing an aldehyde group. Lys. Luman and Frantisek Santavy (Central Polarographic Inst., Prague, Czech.). Chem. Listy 46, 363-6 (1952). Heart glycosides possg. a 3-methylated lactone ring and having a CHO group on carbon 10 of the sterol skeleton show two depolarizing effects on their polarographic curves. In buffered solns., adsorption waves are formed, the height of which is independent of the concn. of the glycosides. A shift of the concn. limit by the use of a streaming electrode allows application of these waves for analytical purposes. In solns. of glycine half-titrated with NaOH, waves have been found corresponding to the reduction of a C:N bond in a condensation product of the aldehyde and glycine. The polarographic behavior of the aglycone atropanthelin resembles that of the glycosides. g-Scrophanthin and gitoxine having no CHO groups show no polarographic effects. With the glycine solns., the anats. of aldehydic glycosides in conc. preps. can be detd.

M. Hnilky

electrochemistry - 7

Use of complexones in chemical analysis. XXXI. The polarography of germanium. P. Valenta and P. Zappalá. (Central Polarographic Inst., Prague, Czech.). *J. Chem. Listy* 46, 478-9 (1952); cf. *C.A.* 46, 11012d. Ge^{4+} shows a polarographic wave at -1.4 v. in a soln. of 0.1 N NH_4OH and 0.1 N NH_4Cl . If the detn. of Ge is carried out in 0.1 M Na_2SO_4 salt of $(\text{CO}_2\text{H})_3\text{NCH}_2\text{CH}_2\text{N}(\text{CO}_2\text{H})_3$ (complexone III) at pH 6-8, the wave at -1.3 v. is formed, this wave is practically const. over the range of pH 6-9 and is undisturbed by excess Zn and As^{5+} . As^{5+} gave a wave which was 0.3 v. more neg. Optimum concns. of Ge for the detn. were 5×10^{-6} to 5×10^{-5} m. 5×10^{-5} at pH 7.5-8. Interfering effect of SiO_2 can be eliminated by the addn. of 10^{-3} M fuchsin. M. Hudlický

TALVIK, A.; ZUMAN, P.; EXNER, O.

Studies on the inductive effect. Pt.3. Coll Cz Chem 29 no.5:
1266-1276 My '64.

1. Institute of Polarography, Czechoslovak Academy of Sciences,
Prague (for Zuman and Exner). 2. Chemical Department, Tartu State
University, Tartu, Estonian S.S.R. (for Talvik).

MANOUSEK, O.; ZUMAN, P.

Polarography of pyridoxine and some of its derivatives.
Coll Cz Chem 29 no. 6:1432-1457 Ja '64.

1. Institute of Polarography, Czechoslovak Academy of
Sciences, Prague.

ZUMAN, P.

Quantitative treatments of substituent effects in polarography.
I. General equation for the relation between polarographic half-wave potentials and the effect of substituents. Coll Cz Chem 25 no.12: 3225-3243 D '60.
(REAI 10:9)

1. Polarographic Institute, Czechoslovak Academy of Science, Prague.
(Polarograph and polarography)

ZUMAN, P.

Polarography of nonbenzenoid aromatic and related substances.
II. The course of the reduction of sydnones at the dropping mercury
electrode. III. The course of the reduction of N,N'-polymethylene-
bis-sydnones. IV. Polar effects of substituents in phenylsydnones;
the application of modified Hammett equation. Coll Cz Chem 25 no.12:
3245-3270 D '60. (EEAI 10:9)

1. Polarographic Institute, Czechoslovak Academy of Science, Prague.

(Polarograph and polarography) (Aromatic compounds)
(Sydnone) (Electrode, Dropping mercury) (Phenylsydnone)
(Hammett equation) (Methylene group)

ZUMAN, P.; SANTAVY, F.

Polarography of cardiac glycosides containing aldehyde groups
[with summary in English]. Sbor.Chekh.khim.rab. 18 no.1:28-35 P '53.
(MLRA 7:6)

1. Central Polarographic Institute, Prague and Chemical Institute of
the Medical Faculty, Palacky University, Olomouc.
(Glycosides) (Polarograph and polarography)

ZUMAN, P.

Polarographic behavior of anthocyanes. Part 1. [in German with summary in Russian]. Sbor. Chekh. khim. rab. 18 no. 1:36-42 P '53. (MLRA 7:6)

- Central Polarographic Institute Prague*
1. Tsentral'nyy polarograficheskiy institut, Praga.
(Anthocyanes) (Polarograph and polarography)

KORYTA, J.; ZUMAN, P.

Polarography of barbituric acid derivatives. Part 1. Barbituric acid
[in German with summary in Russian]. Sbor.Cech.khim. rab. 18 no.2:
197-205 ap '53. (MLRA 7:6)

1. TSentral'nyy polyarograficheskiy institut, Praga.
(Barbituric acid) (Polarograph and polarography)

ZUMAN, P.; PROCHAZKA, Z.

Combined form of ascorbic acid. Part 4. Polarographic determination of ascorbic acid in ascorbigen concentrates [with summary in German]. Sbor.Cekh.khim.rab. 18 no.4:442-449 Ag '53. (MIRA 7:6)

1. TSentral'nyy polarograficheskiy institut i TSentral'nyy khimicheskiy institut, Praga. (Vitamins) (Polarograph and polarography)

ZUMAN, P.; ZUMANOVA, R.; SOUCEK, B.

Polarographic determination of carbon bisulfide by anode rays [in German with summary in Russian]. Sbor. Chokh. khim. rab. 18 no. 5:632-647 0. '53. (MLRA 7:6)

1. Tsentral'nyy polyarograficheskiy institut i Institut professional'nykh zabolevaniy i trudovoy gigiyeny. (Carbon bisulfide) (Polarograph and polarography)

ZUMAN P.

Polarographic determination of carbon disulphide from its anodic wave. p.178
(Chemicke Listy. Vol. 47, no.2, Feb. 1953) Czechoslovakia

SO: Monthly List of East European Accessions, Vol. 2, #3 Library of Congress,
August 1953, Incl.

ZUMAN, P.

"Polarographic determination of carbon disulphide from its anodic wave." p. 189. (CHEMICKE
LISTY, Vol. 47, #2, Feb. 1953, Czechoslovakia)

East European Vol. 2, #8
SO: Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

8
3
Polarographic study of cyanohydrin formation in alkaline media. P. Zeman and P. Santavy (Central Polarographic Inst., Prague, Czech). *Chem. Listy* 47, 207-9 (1953).
Reactions of the CN ion with 24 aromatic aldehydes in alk. media were studied polarographically. Equil. consts. of cyanohydrin formation were computed and compared with titration data from the literature. The influence of substituents and rates of formation were discussed. E. Erdős

ZUMAN, P.; SUE-YUAN TANG

Fission of activated carbon-nitrogen and carbon-sulfur bonds.
Coll Cz Chem 28 no.4:829-837 Ap '63.

1. Polarographic Institute, Czechoslovak Academy of Sciences,
Prague. 2. Petroleum Research Institute, Chinese Academy of
Sciences, Talian, China (standing address for Sue-yuan Tang)

ZUMAN, P.

Congress of the Japanese Polarographic Society, Chem listy 57 no.8:
884-886 Ag '63.

ZUMAN, P.

ZUMAN, P., KORYTA, J., KALVODA, R.

"Polarography of Barbituric Acid Derivatives, Part 2. Veronal," p. 345.
(Chemické Listy, Vol.47, No.3, Mar. 1953, Praha.)

SO:Monthly List of East European Accessions, Vol.2, No.9, Library of Congress, 1953, Uncl.
September, /

ZUMAN, P.

1
Steric effects in organic polarography. P. Zuman, Czechoslovakian Acad. Sci., Prague. *Acta Chim. Acad. Sci. Hung.* 18, 141-64 (1959) (in German).—In some cases the steric and polar factors of the reactivity of org. compds. can be distinguished by polarographic methods. The authors investigated: (1) The steric hindrance of coplanarity; (2) the hindrance of solvation; (3) differences between the properties of diastereomers as regards disson. and complex formation; (4) relations of steric structure to adsorption; (5) steric factors in reactions. In the simplest cases the half-wave potentials ($E_{1/2}$) were characteristic of the electron affinity of the mols. The greater the no. of the conjugated π -electrons the more pos. the potential at which the redn. took place. If 3-phenylaynone (I) was substituted by a Me group in para position, $E_{1/2}$ shifted to more neg. potentials. For ortho Me derivs. this shift was much greater than is explained by the hindrance of coplanarity in the latter case. If the ortho Me group was closed into a ring with I the planes of the rings of the benzene and of I became identical, and $E_{1/2}$ shifted to more pos. potentials. The

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aldehydes of the hydroxylalae (II) group were reduced at much lower $E_{1/2}$ than those of the terpene or convalatoxin type; the oximes and aldimines of the former ones were reduced at more neg. $E_{1/2}$ than the free aldehydes, probably because the oxo group of the II derivs. is unhydrated. *erythro- α,α' -Dibromosuccinic acid* was reduced at more pos. potentials than the *threo* form; for the redn. of the amino the situation was reversed. There was little difference between the $E_{1/2}$ of the esters. The redn. of II ions from ammoniacal Co^{++} solns. was catalyzed differently by *threo*- and *erythro*-phenyleystein because of the difference between their constn. of disson. and complex formation. A capacity phenomenon was noticeable for dehydrotetramethylolrhithidine contg. the tertiary amino group in α -position; for dehydrotetramethylolrhithidine this was not observable (amino group in β -position). This indicates that the α -form adsorbs more easily. In a case of the HCl oxidn. of noncyclic *threo*- and *erythro*-1,2-diols the mixt. of *threo* and *erythro* epimers can be analyzed by the polarographic method.
E. Kautzner

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Pharmaceuticals, Cosmetics, Perfumes

IV. Polarographic Determination of Ascorbic Acid in Food Concentrates
P. J. Zelenka and J. J. Kinsella (Univ. of Illinois, Urbana, Ill.). *J. Am. Chem. Soc.* 76, 4171 (1954).
Combined ascorbic acid content in cabbage concentrates was determined polarographically after the hydrolysis with 1% H_2SO_4 in the absence of air. To a cabbage concentrate (18 ml.) is added 2 ml. 10% H_2SO_4 , a stream of H_2 or CO_2 is passed through the solution, immersed for 8 min. in a 100° bath, the solution is cooled, filled to the mark, and a 0.5-1 ml. aliquot is polarographed in 4 ml. 0.1M acetate buffer pH 4.0. The results are checked by potentiometric and titrimetric methods.
M. Hudlicky

4/1/54
AW

ZUMAN, PETR

Chemical Abstracts
May 25, 1954
Electrochemistry

Reaction of carbonyl compounds with amines. V. Polarographic study of the reaction of cyclohexanone with primary amines: equilibrium states. Miroslav Bazarina and Petr Zuman (Czech. Acad. Sci., Prague). *Chem. Listy* 49: 975-81 (1953); cf. *C. I.* 47, 2059. The cation $C_6H_{11}R^{+}$ obtained by the reaction of cyclohexanone (I), cyclohexanone (II), and methylcyclohexanone (III) with NH_3 (IV), $MeNH_2$ (V), $EtNH_2$, $HOCH_2CH_2NH_2$, $NH_2CH_2CO_2H$ (VI), and $HOCH_2CH_2NH_2CO_2H$ was reducible under polarographic conditions. The equil. consts. of the reaction, and the disoc. consts. of the final ketimines were found. The stability of the condensate depended on the polarity of the starting CHO group as well as on the polarity of the final $C=N$ group. For analytical purposes, the reaction with NH_3 was most suitable and allowed the detn. of cyclohexanone in concns. up to 10^{-4} . Disocn. consts. and half-wave potentials of cyclohexanones were listed (carbonyl comp., amine, disocn. const., and half-wave potential in v.): I, IV, 8.95, -1.56; I, V, 8.8, -1.60; I, VI, 8.78, -1.53; II, IV, 9.15, -1.53; II, V, 9.43, -1.58; II, VI, 9.48, -1.43; III, IV, 9.38, -1.54; III, V, 9.47, -1.52; III, VI, 9.04, -1.50. M. Hudlický

ZUMAN, Petr

Chemical Abstracts
May 25, 1954
Electrochemistry

9
Polarography of Steroids. I. Directly reducible ster-
oids: Δ^4 -cholesterol, methyltestosterone, testosterone,
progesterone, and deoxycorticosterone. Petr Zuman,
Jih Tenzl, and Jindřich Bláha (Czech Acad. Sci.,
Prague). *Chem. Zvesti* 47: 1152-54 (1953). Reduction
waves of Δ^4 -ketosteroids in aq. alc. buffered solns. were
studied. The presence of two forms interconvertible with
pH was ascertained by polarography. Adsorption waves
were found in the alk. range of pH, and with Δ^4 -choleste-
rone-3 and deoxycorticosterone, also in acidic medium. With
lower concns. of EtOH in the solns, catalytic waves were
observed in acidic medium. The most suitable conditions
for the analytical detn. of the total contents of Δ^4 -keto-
steroids and for the detn. of mixts. of some steroids were
described. The detn. of the sum of ketosteroids was best
carried out in 0.1 N LiOH at pH 8-9. Deoxycorticosterone
could be detd. in the presence of testosterone at pH 9.2, in
the presence of methyltestosterone at pH 9.2, and progeste-
rone in the presence of methyltestosterone at pH 9.2.

M. Hedlicky

ZUMAN, P.

Chemical Abst.
Vol. 48
A pr. 10, 1954
Electrochemistry

95
The Hammett equation in polarography. P. Zuman.
(Polarogr. abs., Prague, Czech. Acad. Sci., 1954, 49, 144-148). — The modified Hammett equation $\log i_{\text{red}} = \log i_{\text{red}}^0 + \rho \sigma$ (Bresler and Pearson, J. Am. Chem. Soc. 74, 4128 (1952)) can be applied to meta- and para-derivs. of PhNO_2 , PhI , $(\text{PhN})_2$, and azonaphthalene. The half-wave potentials measured at the same conditions must be taken.
B. Eddi

Translation /M

ZUPAR, P.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

9
Preliminary investigation of the diethyldithiocarbamate-diethyldithiocarbamate disulfide system. P. Zupar, R. Zupar, and B. S. S. (Polym. J. 1954, 1, 102-103).—In addition to an absorption pre-wave, the system gave but one oxidation-reduction wave. The anodic half-wave potential differed from the cathodic one by 30 to 100 mv., according to the concentration of depolarizer and of EtOH and to the pH of the soln.
B. S. S.

ZUMAN, P.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

Potentiometric Behavior of ferrocyanide, ferricyanide, and Prussian Blue.—P. Zaitan (Chim. Ind. (Milan), Italy; *Chim. (Turin)*, 1961, 43, 1652; M. 1063).—The system ferrocyanide: (II) ferricyanide (II) was reversible even on the dropping Hg electrode. In the reaction of II with Fe^{++} in 0.1N H_2SO_4 , the equivalence point was indicated by a drop of the cathodic current to nearly zero. In excess Fe^{++} , the anodic wave also disappeared. This reaction could be suitable for the polarometric titrimetric. Reaction of I with Fe^{++} showed a somewhat different behavior. B. Breda

ZUMAN, P.

Vliv konstituce na polarograficke chovani organickych latek. (Vyd. 1.)
Praha, Nakl. Ceskoslovenske akademie ved, 1954. p. 63. (Ceskoslovenska akademie
ved. Mala kniznice chemickych listr. Sekce chemicka, sv. 1) Effect of
constitution on polarographic behavior of organic substances. 1st ed. bibl.,
diags., graphs, index, tables

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ZUMAN, P.; SANTAVY, F.

Polarographic study of the cyanohydrin reaction in an alkaline medium
[in German with summary in Russian]. Sbor. Chekh. khim. rab. 19 no. 1:174-
176 P '54. (MLRA 7:6)

Polarographic Institute, Czechoslovak Academy of Sciences
1. Polarographisches Institut, Tschechoslowakische Akademie der Wissen-
schaften, Praha, und Institut für Chemie der medizinischen Fakultät,
Olomouc. (Polarograph and polarography) (Cyanohydrin)

Prague and the Chemical Institute of the Academy
Faculty, Olomouc

ZUFAN, P.

"Significance of the Hammett Equation in Polarography." p. 597,
(COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SPOHNIK CHEKOSLOVATSKIKH
KHIMICHESKIKH RABOT, Vol. 19, No. 3, June 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

ZUMAN P.

(/ /)
en relation à l'assassinat de M. X
par M. Y

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620004-6

C L E C H

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620004-6"

ZOLMAN, Petr.

Chemical Abstracts
May 25, 1954
Electrochemistry

1.
2.
Effect of structure on the photographic behavior of
organic compounds. Petr. Zolman (Czech. akad. sci.
Prague). Chem. Listy 48, 64 (1954). A review with
243 references. M. Hudlicky

ZUMAN, PETR

(3) 8
A polarographic study of nitroprusside. Petr Zuman and Miloslav Kabát (Polarogr., Bratis., 1954, 1, 114; Czech.). Chem. Listy 48, 363-77 (1954). The polarographic behavior of the nitroprusside (I) ion in an. buffer solns. and in H₂SO₄ solns. was studied. The reduction of the nitrosyl group in I is different from the reduction of the NO⁺ ion. The blue product of the photolytic oxidation of I and the oxidation product of I in alk. solns. show a polarographic behavior similar to that of ferrocyanide. At 20° the equil. const. of the reaction: $[\text{Fe}(\text{CN})_5\text{CO}]^{3-} + \text{H}_2\text{O} \rightleftharpoons [\text{Fe}(\text{CN})_5\text{NO}]^{4-} + \text{OH}^-$ is 1.35×10^{-4} . The reactions of I with Me₂CO and with secondary amines are discussed.
E. Rada

11-1-51

1. Synthesis of nucleosides and derivatives. The derivatives of
the nucleosides are prepared by derivatization of
the nucleosides with various reagents.

For the study of the electrochemical behavior of the electrode in the presence of the substrate, the electrode was immersed in a solution of 2 moles of the substrate in 100 ml of 0.1 M NaOH. The anodic wave is primarily controlled by the diffusion of the substrate to the electrode. The anodic wave is primarily controlled by the diffusion of the substrate to the electrode. The anodic wave is primarily controlled by the diffusion of the substrate to the electrode.

ZUMAN, P.; ZUMANOVA R.; TEISINGER, J.

Polarography of some sulfur compounds. IV. Anodic waves of 2,3-dimercaptopropanol.
In German. p. 139

Vol. 20, no. 1, Feb. 1955
SBORNIK CHEKHOSLOVATSKIKH KHMICHESKIKH RABOT
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, April 1956

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620004-6

~~SECRET~~ ZOMAN, Kelly

APPROVED FOR RELEASE: 09/01/2001

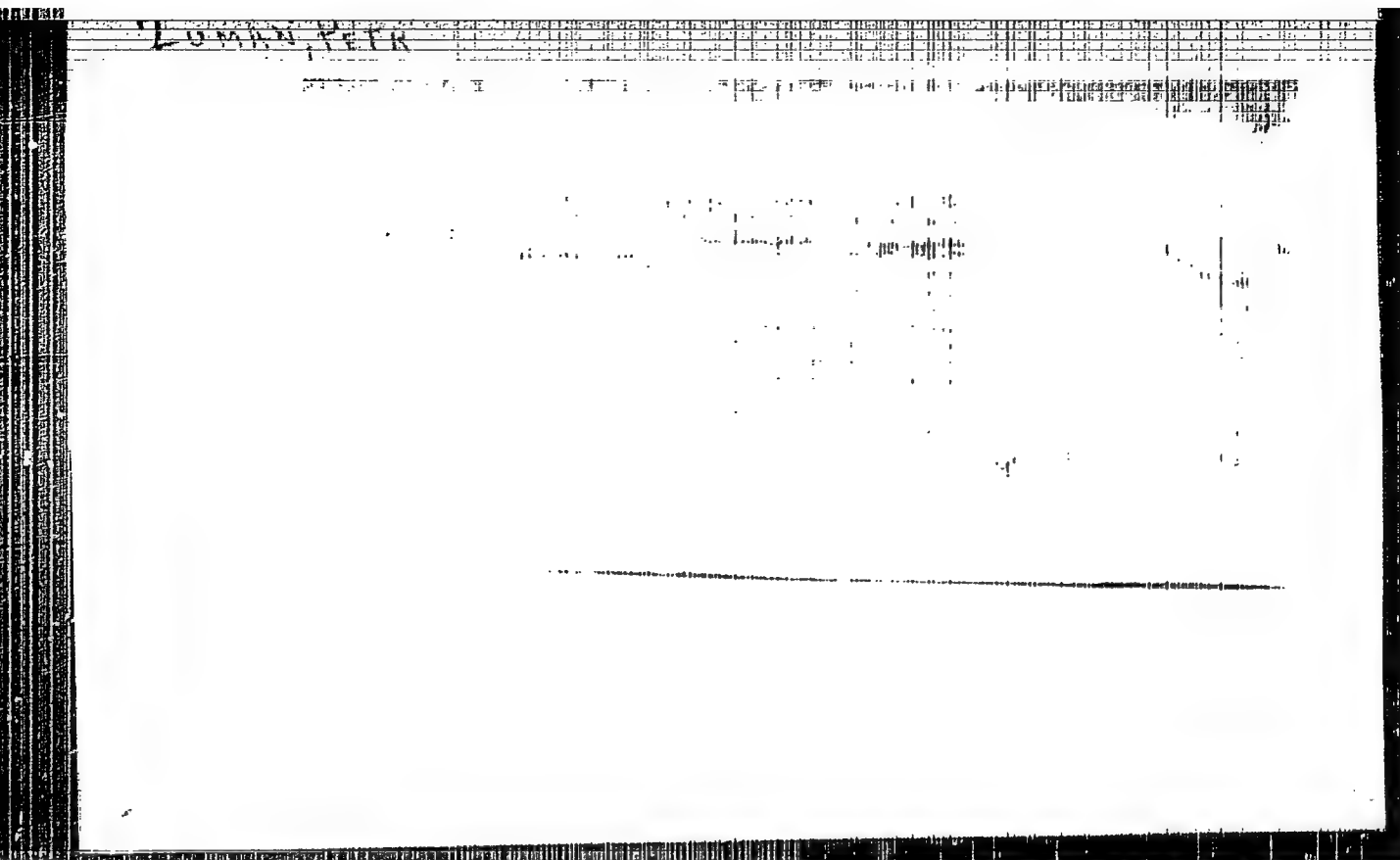
CIA-RDP86-00513R002065620004-6"

✓ Effect of adsorption on anionic polymerization for
formation of nonaromatic polymers and monomers. Fritz J. J. J.
Collection: Chemistry, Chem. Commun. 20, 1974-1975.
(in German) -See C.A. 49, 7430. E. J. J.

ZUPMAN, PETER

✓Polarography of uric acid and thioacetamide. V. Anodic depolarization in solutions of uric acid, its derivatives, and 6-methylthioacetamide. Oswald Manoušek and Peter Zupman. Collection Czechoslov. Chem. Commun. 20. (1955) 113 (1955) in CH
R. J. C.

①



CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Organic Substances

G-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4872

Author : Manousek Osvald, Zuman Peter

Title : Polarography of the Derivatives of Urea and Thiourea.
IX. Polarographic Determination of Derivatives of
Thiobarbituric Acid and 4-Methyl-2-Thiouracil in
Medicaments

Orig Pub : Ceskosl. farmac., 1956, No 4, 193-195; Pharmazie, 1956,
11, No 8, 530-533

Abstract : Determination of derivatives of thiobarbituric acid (I)
is based on dissolution of ~ 0.3 g of the preparation
in 100 ml water, 20-fold dilution with 0.1 M solution of
NaOH and polarographic investigation in an atmosphere of
N₂. The polarograph of V 301 type is equipped with a
mercurousulfate electrode; height of reservoir 75 cm,
duration of fall of the drop 2.4 seconds. The results

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CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Organic
Substances

G-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4872

subjected to polarography.

In Alkyron tablets the polarographic determination
showed 30.4% V, while the bromate- arsenite method
showed 29.8% V.

Communication VIII, see RZhKhim, 1956, 77746.

Card 3/3

- 66 -

ZUMAN, P.

The polarographic determination of vitamins. In German. p. 279. (Acta Chimica, Vol. 9, No. 1/4, 1956, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

ZUMAN, P.

ZUMAN, P. Polarography of some sulfur compounds. V. Complexes of 2, 3-dimercaptopropanols with heavy metals. In German. p. 121. Vol. 21, No. 1, Feb. 1956. Sbornik chechoslovatskikh khimicheskikh raport. COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. Praha, CZECHOSLOVAKIA.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6, NO 4--APRIL 1957

ZUMAN, P. and ZARADNIK, R.

"Kinetics and Mechanism of the Decomposition of Dithio-Carbamic
Acids in Acid Solution. Polarographic Study," Zeitschrift fuer Physikalische
Chemie, p. 135, Dec 1957

ZUMAN, P.

Importance of buffers in analytic chemistry.

p. 172 (Chemie, Vol. 9, no. 2, Apr. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZUFAN, F.

A summer school on physical chemistry in Cambridge.

p. 298. (Chemie, Vol. 9, no. 2, Apr. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZUMAN, P.

The increased number of publications on analytic chemistry issued during the years following the Second World War.

P. 609 (Chemie) Vol. 9, No. 4, Aug. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

ZUMAN, P.

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 63904

Author : Zumanova R; Teisinger J; Zuman P

Inst : Not given

Title : The Influence of Albumens on the Polarographic Behavior of Metals and Their Compounds with 2.3-Dimercaptolpropanol.

Orig Pub: Chem. zvesti, 1957, 11, No 9, 517-527

Abstract: Waves of Au, Ag, Hg, Cu, Sb, Bi, Zn, Cd and Pb are reduced in a citric buffer solution (pH 6.3) with the addition of albumin (I) during which the dependence i_{pr} on the I concentration is exponential. These data are explained by the

Card 1/3

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 63904

Abstract: complex formation of metals (M) with (I); in addition, the Au, Ag, Hg and Bi complexes are not reducible and in the absence of I the waves of these M disappear, while Cu, Cd and Pb complexes are reduced, and their waves are reduced with the addition of I to a somewhat limited value, which is determined by the coefficient of diffusion of these complexes. An adsorption retardation of the process simultaneously appears, which indicates the character of the i_{pr} dependence of the reduced waves on the height of the reservoir Hg and the reduction of the Cu wave only in the limited area of potentials (trough). With the addition of I to the solutions of complexes of M with 2,3-dimercaptolpropanol (II), the M waves are also reduced but only because of the adsorption

Card 2/3

ZUMAN, P.; ZUMANOVA, R.

"Polarography of some sulfur compounds. XI. Oxidation and some other reactions of the 2,3-dimercaptopropanol. In German."

p. 929 (Collection of Czechoslovak Chemical Communications. Sbornik Chekhoslovatskikh Khimicheskikh Rabot.) Vol. 22, no. 3, June 1957.
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

ZUMAN, PETR

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Organic Substances. E-3

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 14234.

Author : Zuman Petr, Krupicka Josef

Inst :

Title : Polarographic Method of Studying the Interaction of Periodic Acid with Glycols.

Orig Pub: Chem. listy, 1957, 51, No 3, 424-432.

Abstract: The method of polarographic determination of periodic acid (I) is utilized for a continuous study of the interaction of salts of I with glycols. The advantage of the above-stated method is its speed which permits to study the kinetics of the reaction, as well as its specific nature, small expenditures of materials and the possibility of determining of a number of substances. A vessel is described which makes it possible rapidly to add and withdraw the solutions, effect rapid and efficient agitation and to eliminate, as

Card : 1/2

CZECHOSLOVAKIA/Organic Chemistry. Theoretical and General
Questions on Organic Chemistry.

G-1

Abs Jour: Ref Zhur-Khin., No 13, 1958, 43207.

Author : Zuman Petr., Slicher Jiri, Krupicka Josef, Svoboda
Miroslav.

Inst :

Title : Stereochemical Studies. VII. Oxidation of Diastereo-
isomeric Diols of $RCH(OH)CH(OH)R'$ Type with Periodate.

Orig Pub: Chem. listy, 1957, 51, No 6, 1068-1081.

Abstract: Polarographic study (see Communication VI, RZhKhim,
1956, 78180) of the rate of oxidation of nine pairs
of acyclic diols of $RCH(OH)CH(OH)R'$ type with periodate
at different pH (2-7.9) and diol concentration
($6 \cdot 10^{-5}$ - $9 \cdot 10^{-4}$ M). Investigated were
ethylene glycol (I), threo- and erythro-isomers of

Card : 1/3

CZECHOSLOVAKIA/Organic Chemistry. Theoretical and General
Questions on Organic Chemistry.

G-1.

Abs Jour: Ref Zhur-Khim., No 13, 1958, 43207.

ment taking place after the interaction of diol with NaIO_4 . A refutation is presented of the assumption that the determinant stage is the decomposition of the cyclic intermediate product of interaction of diol and HIO_4 or IO_4^- , direct interaction of diol with NaIO_4 or ionization of diol, preceding the reaction with NaIO_4 . At all values of concentration and pH the threo-epimers are oxidized more rapidly than erythro-epimers. Thus, from the rate of oxidation it is possible to determine the configuration of substances of this type.

Card : 3/3

ZUMAN, P.E. BRAUDE AND F. NACHOD

"Determination of Organic Structures by Physical Methods; a book review.
p. 1386."

p. 1386 (Chemické Listy, Vol. 51, No. 7 July 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, July 1958

ZUMAN, P

Czechoslovakia

Polarographic Institute, Czechoslovak Academy of
Science -- Prague (Ceskoslovenska akademie věd --
Praha)

Prague, Collection of Czechoslovak Chemical Communications,
No. 9, 1962, pp 2035-2056

"Quantitative Treatments of Substituent Effects in
Polarography. IV. Linear Free Energy Relationships
in Quinoid Series."

ZUMAN, P; SÜE-YUAN TANG.

Czechoslovakia

Polarographic Institute, Czechoslovak Academy of
Science -- Prauge; Petroleum Research
Institute, Chinese Academy of Science, Talien,
China - (for Tang)

Prague, Collection of Czechoslovak Chemical Communications,
No 4, 1963, pp 829-837

"Fission of Activated Carbon-nitrogen and Carbon-
sulphur Bonds. III (PartII - for PartI see
Journal 27, 187 (1962) and Reduction of the C-S
Bond in Methyl Butyl Phenacyl Sulfonium Perchlorate."

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S/OB1/63/C00/C01/029/061
B144/B186

AUTHOR:

Zuman, P.

TITLE:

quantitative estimation of substituent effects in polarography. II. Free energy relations in monocyclic heterocyclic series. III. Substituents in ortho-position

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 1, 1963, 102, abstract 1B712 (Collect. Czechosl. Chem. Commun., v. 27, no. 3, 1962, 630-647; 648-666 [Eng.; summary in Russ.])

TEXT: II. Linear relations are suggested for the dependence of $E_{1/2}$ shifts in monocyclic heterocyclic compounds on the changes in their structure. The following cases are considered: (1) the heterocyclic ring is reduced, whereby the substituent is either directly in the ring, or its effect is transmitted through the benzene ring (the substituent being in meta- or para-position); (2) a group in the side chain is reduced, whereby the effect of the substituent is transmitted either through the heterocyclic ring, or the nature of the heterocyclic ring itself affects the reduction,

Card 1/2

Quantitative estimation ...

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or the substituent is directly in the side chain. Examples of compounds are given and equations are suggested for each of the cases discussed. III. For ortho-substituted compounds of the aromatic series, Hammett's equation cannot be used; Taft's equation is suitable for estimating the effect of ortho-substituents. This equation was applied for establishing the connection between the nature of the ortho-substituent and $E_{1/2}$. It is also suggested that an estimation of this effect, be based on the value of the "ortho-shift"

$$\Delta = E_{1/2}^{o-X} - E_{1/2}^{p-X} \quad (\text{the superscripts indicate that the substituent X is}$$

in ortho- or para-position). Based on these conceptions, frequent cases of the effect of ortho-substituents are considered, which are connected with the disturbance of the coplanarity of the molecule and with the formation of an intramolecular hydrogen bond. Communication I see RZhKhim, 1962, 5B515. [Abstracter's note: Complete translation.]

Card 2/2

AUTHORS:

Zuman, P., Chodkowski, J.

TITLE:

Polarography of nonbenzenoid aromatic and related compounds.
VIII. Adsorption processes during the electroreduction
of the tropylum ion

PERIODICAL:

Referativnyi zhurnal. Khimiya, no. 2, 1963, 90, abstract
2B565 (Collect. Czechosl. Commun. v. 27, no. 4, 1962,
759-774 [Eng.; summary in Russ.])

TEXT:

The tropylum ion reveals up to five waves in buffer solutions with
pH < 4. The first three are adsorption waves arranged close together;
 $\frac{1}{2} = -0.16$, -0.23 and -0.28 v (with respect to satur. c. s.) in the
Britton-Robinson buffer solution. The total i of the four waves is
diffusional. For the fourth wave $\frac{1}{2} = -0.65$ v. The fifth wave
($\frac{1}{2} = -1.2$ v) seems to be produced by capacitative phenomena for $\frac{1}{2}$ of
desorption in conjunction with a polarographic maximum of the second kind.
Card 1/2

Polarography of nonbenzenoid ...

S/081/63/000/002/013/088
B193/B102

The first adsorption wave corresponds to plane orientation; theoretically 29 \AA^2 cathode surface covers one heptagon ring of reaction product. The second adsorption wave corresponds to a different orientation; finally, the third wave corresponds to the formation of a semi-molecular layer. For the fourth wave the product film is desorbed (see also RZhKhim, 1959, no. 9, 30670). For commun. VII see RZhKhim, 1962, 68531. [Abstracter's note: Complete translation.]

Card 2/2

ZUMAN, Pavel

International symposium on analytical chemistry in Birmingham.
Vestnik CSAV 71 no.5:580-581 '62.

CZECHOSLOVAKIA/Analytic Chemistry. Analysis of Organic
Substances.

E

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77364.

Author : Zurvan P., Krupicka J.

Inst :

Title : A Polarographic Method for the Study of Glycol
Fission by Periodic Acid.

Orig Pub: Collect. czechosl. chem. commun., 1958, 23, No 4,
598-607.

Abstract: See RZhKhin, 1958, 14234.

Card : 1/1

Country	: Czechoslovakia	G-1
Category	: Organic Chemistry. Theoretical Organic Chemistry	
Abs. Jour.	: Ref. Zhur.-Khimiya No. 6, 1969	19286
Author	: Zuman, P.; Sicher, J.; Krupicka, J.; Svoboda, M.	
Institut.	:	
Title	: Stereochemical Studies. VII. Periodate Oxidation of Diastereoisomeric Diols of the Type R.CH(OH).CH(OH).R'.	
Orig Pub.	: Collect. czechosl. chem. commun., 1958, 23, No 7, 1237-1251	
Abstract	: See RZhKhim, 1958, 43207.	

Card: 1/1

CZECHOSLOVAKIA / Physical Chemistry. Kinetics. Combustion. Explosives. Topochemistry. Catalysis. B-9

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 76707.

Author : Zahradnik, R. and Zuman, P.

Inst : Not given.

Title : Carbamates, Monothiocarbamates, and Dithiocarbamates. VIII. A Polarographic Study of the Kinetics and of the Mechanism of the Decomposition of Dithiocarbamic Acids in Acid Medium.

Orig Pub: Chem Listy, 52, No 2, 231-242 (1958) (in Czech).

Abstract: The mechanism of the decomposition of nine monoalkyl- and nine dialkyldithiocarbamates has been investigated as a function of $[H^+]$. The rate constant k for the decomposition has the form $k' = k[H^+]/([H^+] + K)$, where k' is the apparent

Card 1/2

Distr: 4226(j)

✓ Steric effects on the catalytic evolution of hydrogen in ammoniacal cobalt solutions in the presence of threo- and erythro-phenylalanes. P. Zeman (Polarograph. Inst. Bratislava, Acad. Sci., Prague). *Chem. Abstr.* 52, 1319-50 (1958). In the solus. contg. Co^{++} and 10% phenylalanine, polarographic catalytic waves were not observed, but they were well developed in solus. with Co^{++} . The catalytic wave of the erythro form was higher than that of the threo form of the same concn. The difference of the height of both waves may be caused by different dissociation constants or by different stabilities of the Co^{++} complex. P. Stránský

3 May

29

UETR LUMIN

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Polarography of steroids. III. Polarographic reduction of the steroids with an 18-aldehyde group. Petr Zimný and Václav Černý (Polarograf. ústav, Čs. akad. věd, Praha). Chem. listy 52, 1400-73 (1958); ch. C.A. 49, 67 (1958). Polarographic reduction of steroids which have an aldehyde group in position 18 and a branched chain in position 17 differed from the reduction of other aldehydes. The heights of their waves and the half-wave potentials did not depend on the pH value, which was explained by steric inhibition of hydration. The bulky 8 α -dimethyl amino group of polar-
rhidine did not allow adsorption on the dropping Hg electrode. This substance did not show capacity effect and had a much lower efficiency in suppressing max. than the substances with a 20-dimethylamino group. F. Šeršfeld.

9-9

ZUMAN, P.

"New trends in the qualitative analysis of organic compounds"

Chemické Listy. Praha, Czechoslovakia. Vol. 53, no. 3, Mar 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclass

ZUMAN, P. ; MANOUSEK, O.

Polarography of derivatives of urea and thiourea. V. Anodic depolarisation in solutions of uracil, its derivatives, and 4-methyl-2-thiouracil. p. 668

CHIMICKE LISTY (Ceskoslovenska akademie ved. Ceskoslovenska spolecnost chemiku) Praha, Czechoslovakia. Vol. 49, no. 5, May 1955

Monthly List of East European Accessions (EEAI) LC. Vol. 9/1960
Uncl.

ZUMAN, P. ; ZUMANOVA, R.

Polarography of some sulfur compounds. V. Complexes of 2, 3,- dimercapto-
propanol with heavy metals. p. 652.

CHIMICKE LISTY (Ceskaslovenska akademie ved. Ceskaslovenska spolecnost
chemicks) Praha, Czechoslovakia. Vol. 49, no. 5, May, 1955

Monthly List of East European Accessions (EEAI) IC, Vol. 9/ 1960
Uncl.

ZUMAN, P.

Steric effects in the polarography of organic compounds. p. 154.

CHEMICKE LISTY. (Ceskoslovenska akademie ved. Chemicky ustav) Praha, Czechoslovakia, Vol. 53, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
uncl.

COLLECT	: GDR	3-12
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 5 1960, No.	17174
AUTHOR	: Zuman, P.	
INST.	: Not given	
TITLE	: Steric Effects in the Polarography of Organic Compounds	
ORIG. PUB.	: Chem Listy, 53, No 2, 154-165 (1959)	
ABSTRACT	: A review article with a bibliography listing 38 titles.	
	S. Zhdanov	

CARD: 1/1

CARSKY, P.; ZUMAN, P.; HORAK, V.

Fission of activated carbon-nitrogen and carbon-sulfur bonds.
Pt. 5. Coll Cz Chem 2 no.12:3044-3056 D 1961.

1. J. Heyrovsky Institute of Polarography of the Czechoslovak Academy of Sciences, and Department of Organic Chemistry of Charles University, Prague. 2. Editorial Board Member, "Collection of Czechoslovak Chemical Communications" (for Zuman).

ZUMAN, P.; MAHOUSEK, O.; HORAK, V.

Fission of activated carbon-nitrogen and carbon-sulphur bonds. Pt. 6.
Coll Cz Chem 29 no.12:2906-2912 D '64.

1. Jaroslav Heyrovsky Institute of Polarography of the Czechoslovak Academy of Sciences, and Institute of Organic Chemistry of Charles University, Prague. 2. Editorial Board Member, "Collection of Czechoslovak Chemical Communications" (for Zuman).

CINCHOLINAKA

BESTAKOVA, I.; ZIMAN, P.; HORAN, V.

1. J. Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences (for Bestakova?); 2. Institute of Organic Chemistry, Karlov Univ., Prague (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb 1966, pp 827-834

"Fluorescence of activated carbon-nitrogen and carbon-sulfur bands. Part 2: Elimination of β -piperidineethyl phenyl sulfone methiodide and reaction of phenyl vinyl sulfone with hydronyl ions."

Z. U. V. I. A. N., P.

(2) CIOELVAKIA

CABSKI, P., ZIMAN, P., BOHLAK, V.

1. J. Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences,
Prague - (for ?); 2. Department of Organic Chemistry, Karlov University,
Prague - (for ?).

Prague, Collection of Czechoslovak Chemical Communications, No 12,
December 1965, pp 4116-4116

"Fission of activated carbon-nitrogen and carbon-sulfur bonds. Part 7:
Kinetics of ketol formation from α,β -unsaturated ketones in alkaline
media."

(For the 75th birthday of Academician J. Heyrovsky).

MANOUSEK, O.; ZUMAN, P.

Polarographic reduction of 2-(2-methyl-3-hydroxy-5-hydroxy-methyl-4-pyridyl) thiazolidine-4-carboxylic acid. Coll Cz chem 29 no.7:1718-1722 JI '64.

1. Polarographic Institute, Czechoslovak Academy of Sciences, Prague.

FEDORONKO, M.; ZHUKOV, V.

Polarography of urea and thiourea derivatives. Pt. 13. Coll Cz
Chem 29 no.9:2125-2133 S 1964.

1. Jaroslav Heyrovsky Institute of Polarography, Czechoslovak
Academy of Sciences, Prague. 2. Chemical Institute, Slovak Academy
of Sciences, Bratislava (present address for Fedoronko).

ZUMAN, P.

[illegible]

"Chemical kinetics" by J.C.Jungers and others. Reviewed by P. Zuman. Chem listy 58 no. 4:480-481 Ap '64.

ZUMAN, P.

Lectures on electroanalytic chemistry at the Congress of
International Union of Pure and Applied Chemistry in
London, 1963. Chem listy 58 no.1:54-58 Ja'64.

ZUMAN, Petr

"Oscillographic measurement methods" by Robert Kalvoda.
Reviewed by Petr Zuman. Chem prum 14 no.5:282 My '64.

1. Institute of Polarography, Czechoslovak Academy of Sciences.

ZUMAN, P.

"International Union of Pure and Applied Chemistry, 18th International Congress of Pure and Applied Chemistry, Montreal 1961; Special lectures from the Physical and Applied Chemistry Divisions."
Reviewed by P.Zuman. Chem listy 57 no.9:935-936 8 '63.

SUE-YUAN TANG; ZUMAN, P.

A new type of maximum on the limiting current of the reduction wave of phenacyl sulfonium ions. Coll Cs Chem 28 no.6:1524-1534 Jo '63.

1. Polarographic Institute, Czechoslovak Academy of Sciences, Prague (for Zuman).
2. Petroleum Research Institute, Chinese Academy of Sciences, Talian, China (for Sue-Yuan Tang).

ZUMAN, Petr

The following information is classified as secret

Japanese polarography. Vestnik CSAV 72 no.3:396-397. '63.

ZUMAN, P.

Conference on the use of correlative equations in organic
chemistry in Tartu, U.S.S.R. Chem listy 57 no.3:291-294
Mr '63.

ZUMAN, Petr

Conference on the use of correlation equations in organic chemistry. Vestnik CSAV 72 no.1:151-152 '63.

COUNTRY	:	Czechoslovakia	B-9
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 23 1959, No.	81371
AUTHOR	:	Zahradnik, R.; Zuzlan, P.	
INST.	:	Not given	
TITLE	:	Carbaminate, Monothiocarbaminates and Dithio- carbamates. VIII. Polarographic Studies of the Kinetics and Mechanism of Dithio- *	
ORIG. PUB.	:	Collect. Czechosl. Chem. Commun., 1959, 24, #4, 1132-1145.	
ABSTRACT	:	See RZKhim, 1958, #23, 76707.	

CARD: 1/1

* carbaminic Acids Decomposition in the Acid
Medium

ZUMAN, P., and others.

"Stereochemical studies. VII. Oxidation of diastereoisomeric diols of the type $R\cdot CH(OH)\cdot CH(OH)\cdot R'$ with periodate."

p. 1068 (Chemické Listy, Vol. 51, no. 6, June 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958.

ZUMAN, P.

"Mechanism of homogenous reactions of organic matter. II. Methods of the reaction kinetics. (Conclusion)"

p. 482 (Chemie, Vol. 10, no. 6, June 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

ZUMAN, P.

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PHASE I BOOK EXPLOITATION

CZECH/2433

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polarografického sjezdu. Díl 3: Hlavní referáty přednesené na sjezdu. Proceedings... Vol 3: Reviews Read at the Congress. Praha, Přírodovědecké vyd-ví [1952] 774 p. 2,000 copies printed.

Resp. Ed.: Jiří Koryta, Doctor; Chief Ed. of Publishing House: Milan Skalník, Doctor; Tech. Ed.: Oldřich Dunka.

PURPOSE: The book is intended for chemists, chemical engineers, and physicists.

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. Uses of polarography in organic and inorganic analysis, biochemistry, medicine, and industrial chemistry are discussed. In that section, Reviews Read at the Congress, Russian and either German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which

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CZECH/2433

Proceedings (Cont.)

have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Wiltor Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromir Dolansky, Minister of Planning; Professor Jaroslav Herovsky, Chairman of the Congress; and Professor Jaroslav Fukatko, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

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Equation in the Deduction of the Polarographic Wave Equa- 359

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Masek, J. Discontinuity on Polarographic Curves Observed
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